

**Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the application:

**Listing of Claims:**

**Claim 1 (Currently Amended):** A tire parameter sensing system for a vehicle having a plurality of tires, the tire parameter sensing system comprising:

a plurality of tire-based parameter sensing units, each tire-based unit having an associated tire and being configured to receive initiation signals and, in response thereto, to transmit response signals;

a vehicle-based unit for receiving response signals from the tire-based units and for transmitting the initiation signals to the tire-based units; and

a plurality of signal masking devices coupled to the vehicle-based unit, each of the signal masking devices having an associated tire location in which a tire-based unit is located, each signal masking device being actuable for masking the initiation signals near its associated tire location, ~~the~~ actuation of a masking device blocking receipt of the initiation signal by its associated tire-based unit ~~units only responding to unmasked initiation signals,~~

the vehicle-based unit controlling the signal masking devices so as to control the associated tire location from which a tire-based unit responds to the initiation signals.

**Claim 2 (Original):** The tire parameter sensing system of claim 1 wherein each signal masking device is a noise source that, when actuated, reduces a signal-to-noise ratio of the initiation signals at the associated tire location to below a predetermined threshold value required for a tire-based unit located in the associated tire location to be responsive to the initiation signals.

**Claim 3 (Original):** The tire parameter sensing system of claim 2 wherein each noise source comprises a capacitor and an inductor in series with one another for producing noise when supplied with an alternating current.

**Claim 4 (Original):** The tire parameter sensing system of claim 1 wherein each response signal includes an identification portion that identifies the tire-based unit that transmitted the response signal, the vehicle-based unit including means for associating the identification portion of received response signals with the associated tire location having a non-actuated masking device.

**Claim 5 (Original):** The tire parameter sensing system of claim 1 wherein the vehicle-based unit includes first and second antennas and a switch for connecting to one of the first and second antennas, the first antenna directing initiation signals along a first path and the second antenna directing initiation signals along a second, different path.

**Claim 6 (Original):** A tire parameter sensing system for a vehicle having a plurality of tires, the tire parameter sensing system comprising:

a plurality of tire-based units, each of the plurality of tire-based units having an associated tire and including a receiving portion for receiving an initiation signal, a sensing portion for sensing a parameter of the associated tire, and a transmitting portion for transmitting a parameter signal indicative of the sensed parameter, each of the tire-based units being responsive to a received initiation signal having a signal-to-noise ratio exceeding a predetermined value for transmitting the parameter signal;

a vehicle-based unit including a transmitter for transmitting initiation signals to the tire-based units and a receiver for receiving parameter signals from the tire-based units; and

a plurality of noise sources coupled to the vehicle-based unit and actuatable by the vehicle-based unit for transmitting noise, each of the noise sources having an associated tire-based unit and, when actuated, affecting the signal-to-noise ratio of any initiation signal within a predetermined area relative to the actuated noise source,

the vehicle-based unit controlling initiation the tire-based units by controlling actuation of the noise sources.

**Claim 7 (Original):** The tire parameter sensing system of claim 6 wherein each parameter signal includes an identification portion that identifies the tire-based unit that transmitted the parameter signal, the vehicle-based unit determining which tire-based unit is associated with each noise source and associating the identification portion of parameter signals transmitted by the associated tire-based unit with a location on the vehicle of the noise source.

**Claim 8 (Original):** The tire parameter sensing system of claim 6 wherein each noise sources comprise a capacitor and an inductor in series with one another for producing noise when supplied with an alternating current.

**Claim 9 (Original):** The tire parameter sensing system of claim 6 wherein the vehicle-based unit includes first and second antennas and a switch for connecting to one of the first and second antennas, the first antenna directing initiation signals along a first path and the second antenna directing initiation signals along a second, different path.

**Claim 10 (Original):** A method for determining associated locations on a vehicle of tire-based units of a tire parameter sensing system, the method comprising the steps of:

transmitting an initiation signal from a vehicle-based unit;

controlling actuation of a plurality of signal masking devices during transmission of the initiation signal so that only a tire-based unit located near a first signal masking device responds to the transmitted initiation signal;

receiving a parameter signal from the tire based unit responding to the initiation signal; and

associating the responding tire-based unit with a location on the vehicle of the first signal masking device.

**Claim 11 (Original)** The method of claim 10 further including the steps of:

transmitting subsequent initiation signals;

receiving subsequent parameter signals from the responding tire-based unit; and

associating the responding tire-based unit to the first signal masking device only after receiving an identification portion of the responding tire-based unit a predetermined number of times.

**Claim 12 (Original):** The method of claim 10 further including the steps of:

transmitting a subsequent initiation signal from the vehicle-based unit;

controlling actuation of the plurality of signal masking devices during transmission of the subsequent initiation signal so that only a tire-based unit associated with a second signal masking device responds to the transmitted initiation signal;

receiving a parameter signal from the tire-based unit responding to the subsequent initiation signal; and

associating the tire-based unit responding to the subsequent initiation signal with a location on the vehicle of the second signal masking device.

**Claim 13 (Original):** The method of claim 10 wherein the step of controlling actuation of a plurality of signal masking devices during transmission of the initiation signal so that only a tire-based unit associated with a first signal masking device responds to the transmitted initiation signal includes the step of:

actuating each of the plurality of signal masking devices except the first signal masking device during transmission of the initiation signal.

**Claim 14 (Original):** The method of claim 10 wherein the step of transmitting an initiation signal from a vehicle-based unit further includes the step of controlling a switch for connecting to one of first and second antennas.